Research In Washington

Higher Education Expenditures on Research

Funding Comes in Three Major Forms

- Direct Grants/Contracts, largely from the Federal Government
  - Department of Health, National Science Foundation
  - Private grants from foundations
- Direct state appropriations
  - Usually in 'base' funding for the public colleges; very few direct research provisos in the budget
- Indirect State appropriations (faculty salaries)
  - Many/most faculty members spend at least some time on research/scholarship
  - This 'indirect' support is often ignored

Direct Grants Vary Considerably by Sector

Research Sector:

- University of Washington is largest public recipient of federal research funding in the nation at almost $800 million each year
- Private/foundation grants push UW total to $996 million
- WSU is around the 70th largest public recipient with about $129 million per year in sponsored research grants

Regional Sector:

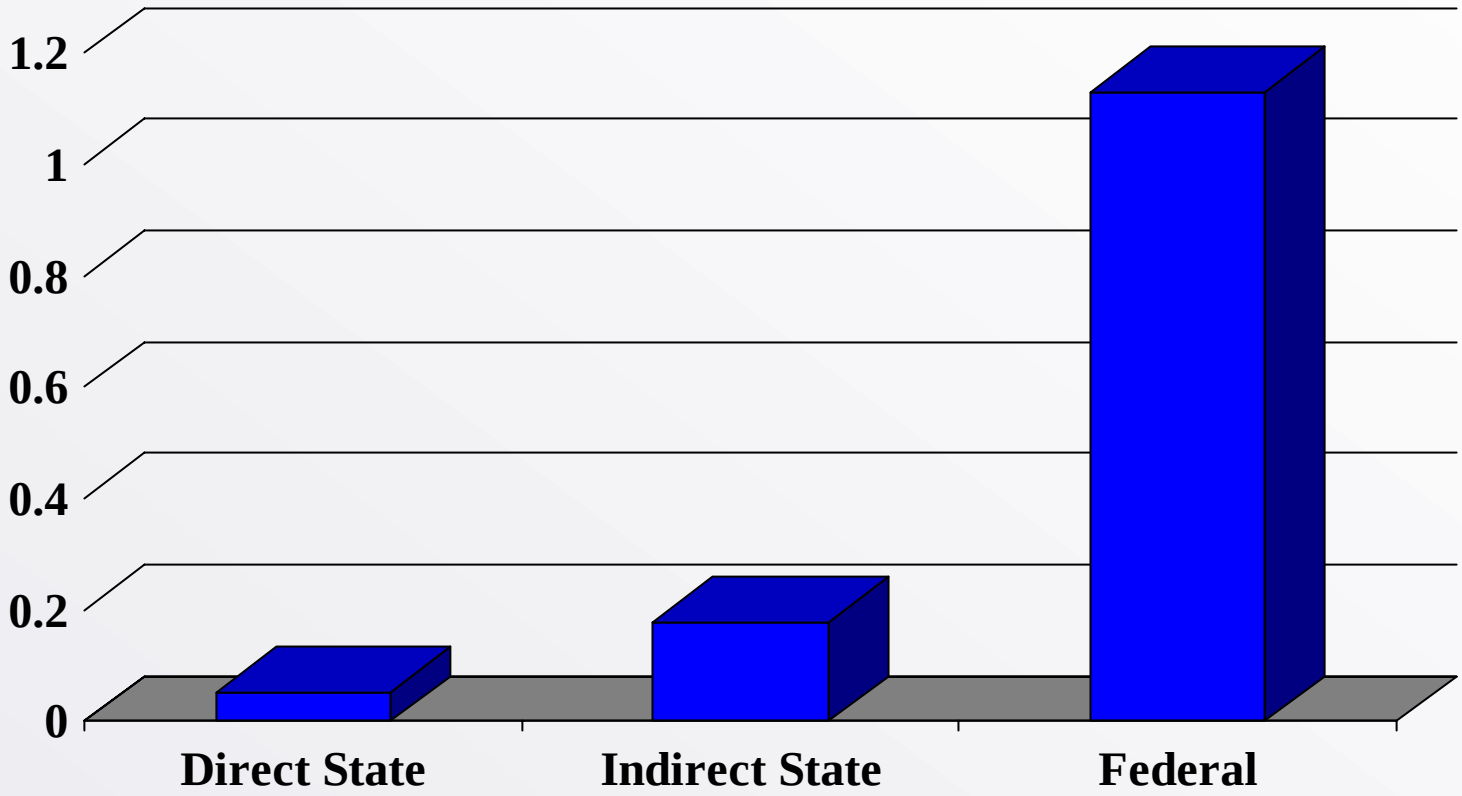
- Western Washington University ranked in the top ten amongst comprehensive institutions, but received less than $11 million in 2005
- Other comprehensives receive a few million per year

Sources of Grant Funding

- For UW, the largest source of grants of the Department of Health and Human Services, at over $500 million per year
  - The National Science Foundation is a distant second
- WSU spends over $50 million in agricultural research
  - Plurality of Agricultural Resource Center's funding comes from the state; $18.4 million comes from Department of Agriculture
- WSU also spends about $20 million in grants from the Department of HHS grants and another $14 million from the Department of Energy

Grants By Category

(Dollars in billions)



What Are Other States Doing?

- California's Proposition 71, passed in 2004, authorized a bond sale of $3 billion to fund stem-cell research-
  - Program will expend $300 million per year for ten years
- Wisconsin Gov. pledged $750 million for biomedical research
  - Much of this would go towards construction of new facilities
- New York appropriated $125 million for nanotechnology research at SUNY-Albany
- Total funding from all 50 states on nanotechnology alone estimated at $400 million in FY 2004 according to one study

State Funding Does Not Always Equal Success…

- A recent Lux Research study of the most competitive states in nanotechnology showed that other factors are more important than direct state funding for research
- #1 state, Massachusetts, spent far less than nearby New York
- California is #2, with large state expenditures, but Colorado is #4 despite no state investment
- Washington is #10, with almost zero state expenditures in nanotechnology
  - Early adoption of a degree program at UW
  - NSF/DOH grants
  - Pattern of commercializing technology
- External economies matter most

…But Research Activity Impacts State Economy

- Sponsored grants/research at Washington research institutions directly supports over 13,000 jobs
- Department of Commerce ‘multiplier’ is 1.7; that is, for every dollar spent on research, $1.7 is generated
- Technology licenses generate almost $21 million in annual income
- UW estimates 34,000 jobs created statewide from sponsored research
  - 188 new firms
- WSU research has created helped to foster and grow new crops (‘Round-Up Ready’ Soybeans) as well as industries (viticulture)

What Should The State Do?

- State investment in research is low, but federal investment is very high
- The research awards, and firms that are created out of basic research, significantly impact the State's economy
- Washington spends very little on a per-capita basis, but is still a very tech-dependent, new-economy state
- Can UW/WSU continue to compete in an increasingly global market for top researchers without state support?
- Is funding research as important as funding access or financial aid?